Primary Streets

Primary Arterial and Collector streets are specifically located framework streets that serve and connect Bay Meadows to the existing street network of the larger San Mateo area. These streets provide for both local Bay Meadows travel and some level of citywide travel, as well as provide access for emergency vehicles. Primary Streets shall be public streets.

Delaware Street

The Delaware Street extension shall be the primary north-south street through the site and extends from the County Expo site in the north through the site to connect to 31st Avenue and Pacific Boulevard in the south. It has four different cross sections to respond to the surrounding contextual conditions. North of 28th Avenue, the extension of the existing street from 25th Avenue, Delaware Street provides a conventional four-lane cross-section with bike lanes emphasizing the movement of vehicles. As Delaware Street approaches 28th Avenue it widens to provide for four travel lanes and a center left turn lane plus bike lanes. There is no on-street parking along this segment. Pedestrians are served with sidewalks on both sides of the street, buffered from moving traffic with a landscaping strip (See Figures IV-32, IV-33 and IV-34).
The third section describes Delaware's transformation into a two-lane village "main street" near the center of the mixed use neighborhood adjacent to the proposed Caltrain Station between 28th and 31st Avenues. This is in keeping with the pedestrian character and quality of the Station Square area and reinforces Phase II transit-oriented development principles. Angled-parking spaces for short term users are provided on both sides of the street between landscaped planting beds. Narrower travel lanes serve to slow traffic and enhance the pedestrian environment. Wider sidewalks along with the required retail frontage provide a round-the-clock setting for this "village center". Special landscaping that could include hanging flower baskets, movable planters, benches, seasonal displays, and outdoor cafe seating is strongly encouraged on this street. Any encroachment permits that may be required will be processed during Site Plan and Architectural Review (See Figure IV-35).

The fourth section is south of 31st Avenue where Delaware Street serves a mix of residential and office uses. This section continues as a two-lane section with parallel on-street parking on both sides of the street. The internal bicycle system continues on this section of Delaware Street via a multi-use path signed for pedestrians and cyclists on the east side of the street. Pedestrians are accommodated by the multi-use path and sidewalks on the west side of the street and buffered from moving traffic by a landscaped strip (See Figure IV-36).
28th Avenue shall be the primary east-west connection in the northern part of the site, linking El Camino Real to Saratoga Drive through a grade separation at the railroad. West of Delaware Street, 28th Avenue has four-lanes of travel. Pedestrians are accommodated with a sidewalk on the south side of the street and pedestrians and bicyclists are provided a multi-use path on the north side of the street. 28th Avenue’s right of way west of Delaware is restricted by the construction limitations of the rail crossing and existing conditions west of the tracks. East of the railroad, 28th Avenue connects Delaware Street to Saratoga Drive and provides frontage to both the County Expo Property and the North Station/Mixed Use Neighborhood. It serves both local Bay Meadows travel as well as an east-west citywide connection. Between the railroad grade-separation and Delaware Street, 28th Avenue provides four lanes of travel plus a center left turn lane. Pedestrians are accommodated with a sidewalk on the south side of the street and pedestrians and bicyclists are provided a multi-use path on the north side of the street, with both sides buffered from moving traffic with a tree-lined planting strip (See Figure IV-37).
East of Delaware, 28th Avenue is a boulevard with wide landscaped borders. Between Delaware Street and Saratoga Drive, 28th Avenue is a two-lane street with left-turn bays at key intersections and on-street parking on both sides of the street (see Figures IV-38 and IV-39). Bicycle travel is accommodated with a multi-use path along the north side of 28th Avenue. Bicycle connections to the Saratoga Drive bike lanes and the Bay Meadows neighborhoods south of 28th Avenue are provided at signalized intersections. Pedestrians are accommodated with sidewalks fronting the North Station/Mixed Use Neighborhood buffered by a tree-lined planting strip. The Expo Center frontage of 28th Avenue contains a tree-lined planting strip and the multi-use path for use by both pedestrians and bicyclists on the north side.
Franklin Parkway and 31st Avenue

Franklin Parkway shall be the primary east-west connection in the southern portion of the site, and provides a direct access between Bay Meadows and Highway 101. It currently provides access only to the Franklin Templeton Campus, but is to be extended westward as a four-lane roadway with a raised median to connect to Delaware Street and 31st Avenue. The existing cross-section of Franklin Boulevard, with its landscaped median and four travel lanes, will be extended diagonally into Phase II, to transition into 31st Avenue. A future grade separation of the railroad will allow 31st Avenue to connect with El Camino Real providing a parallel facility to Hillsdale Boulevard. 31st Avenue will provide four travel lanes and a raised median that accommodates left turn bays. No on-street parking is permitted on this street. Pedestrians are accommodated with sidewalks on both sides of the street buffered from traffic with tree-lined planting strips (See Figure IV-40). West of Delaware Street, 31st Avenue provides a five-lane cross section accommodating two lanes in each direction and a center turn lane, but without a raised median. Pedestrians continue to be accommodated with sidewalks on both sides of the street buffered from traffic with tree-lined planting strips (See Figure IV-41). Under the railroad grade-separation, 31st Avenue narrows to four travel lanes. Pedestrians are accommodated with sidewalks without planting strips.
Secondary Streets
Secondary (Local) streets are those specifically located framework streets that connect the three major neighborhoods, and the neighborhoods to the Primary streets. They provide frontage and access to the neighborhood buildings as well as alternative routes to primary streets for local travel. Additionally, secondary streets provide pedestrian paths and, on selected streets, bicycle facilities. They are intended to primarily serve the Bay Meadows development and are designed to respond to the characteristics and scale of the particular neighborhood they serve, not to be exclusive thoroughfares. At least one secondary street shall connect 28th Avenue and Franklin Parkway in the north south direction. Another secondary street passing through the center of Phase II creates a one way couplet within the Residential Neighborhoods surrounding the linear park. Parking and service to the interior of the blocks can be accessed from these streets. Secondary streets may be public or private. If private streets are proposed, these guidelines must be followed to ensure the coherent nature of the neighborhood.

Typical Secondary Streets
Typical Secondary Streets are used within the Residential Neighborhoods. They can be east-west or north-south oriented to create smaller blocks that are suitable for residential development within the development parcels. As low volume and low speed streets that serve residential buildings, typical secondary streets have narrower lanes and on-street parking on both sides of the street. Pedestrians are served with sidewalks on both sides of the street buffered from moving traffic with both on-street parking and tree-lined planting strips. Depending on whether the street contains a bicycle route designation, additional changes to the standard residential street section may be required (See Figure IV-42).

FIGURE IV-42: SECTION J
Typical Street
Typical Secondary Streets with bike paths (See Figure IV-43) differ from other secondary streets in that they provide for shared bicycle and vehicular travel; Class III bike routes providing internal bicycle connections to public open space, plazas, and the train station. These streets provide wider shared travel lanes and provide on-street parking on only one side of the street.

**Typical Residential Street**

Typical Secondary Streets also serve as gateways to Residential Neighborhoods. In that role, these short distance, low volume and low speed streets that serve residential districts have wider lanes and no on-street parking. Pedestrians are served with sidewalks on both sides of the street buffered from moving traffic with tree-lined planting strips. As gateways, typical residential streets may have narrow raised medians (See Figure IV-44).

**FIGURE IV-43: SECTION K**

Typical Street Section

**FIGURE IV-44: SECTION L**

Residential Cross-Section
Linear Park and One-Way Streets

A pair of one-way Streets are used around the linear neighborhood park open space oriented north-south on the site extending from 28th Avenue into the Residential Neighborhood. This one-way couplet is designed to be an extension of the park space, and surrounded by building facades to create a sense of enclosure. On-street parking is provided on one side of the street serving the residential buildings. Sidewalks are provided on both sides of the street buffered from the street with tree-lined planting strips. As part of the bicycle system traversing north-south through the site, the linear park streets provide Class II striped bike lanes in each direction (See Figure IV-45 and IV-46).

FIGURE IV-45: SECTION M
One Way Street Section

FIGURE IV-46: SECTION N
Section at Linear Park
Local Streets

Local streets are not specifically located in the Phase II Specific Plan Area but serve to further break down the site into comfortably scaled smaller sub-Blocks/parcels. They are to be used at the discretion of the individual Block developers to create variety, amenity, local mobility and land access within the Blocks while dividing the Blocks into sub-Blocks/parcels for a variety of residential or commercial building types. Additional streets constructed within the commercial precinct may be public or private but shall conform to the standards of Typical Streets as outlined above. Additional streets designated for the Residential Neighborhood shall be designed as Typical Residential Streets as outlined above. Local streets may be either public or private.

Pedestrian Mews

Pedestrian Mews are intimately scaled mid sub-Block/parcel landscaped pedestrian-only streets typically providing frontage to townhouse developments. Pedestrian Mews should be used to create a sense of variety and break down the scale of a large Block.

Alleys

Alleys are used to provide service, parking and emergency access, and utility easements from the rear of residential buildings. They should be used advantageously to prevent garage doors and unbuffered parking structures to be exposed to vehicular or pedestrian streets.
Pedestrian Passages

Pedestrian Passages are pedestrian-only connectors located between commercial or residential buildings. They provide shortcuts through long blocks, or connect rear parking areas with street frontages. Passages may be roofed over in mixed-use and commercial neighborhoods or built over in residential neighborhoods. Passages may be lined by shop fronts or landscaped, but must connect directly with the sidewalk network of the street system. Passages may, but are not required to accommodate bicycles. Please refer to page IV-57 and Figure IV-51 for a complete description of the bicycle circulation in the Specific Plan Amendment.

FIGURE IV-49
Section of an open Pedestrian Passage

FIGURE IV-50
Section of a covered Pedestrian Passage
The streets criteria provided in Table IV-11 below are provided as a guideline, and may be adjusted during Site Plan and Architectural Review, as long as the adjustments are consistent with the intent of this Specific Plan Amendment. However, the total amount of right of way overall shall be no greater than the amount provided in this Specific Plan Amendment, except that a minor increase in the right-of-way may be required by the City at the intersection of 28th Avenue and Delaware Street to accommodate intersection design.

### Table IV-11
Street Design Criteria Chart

<table>
<thead>
<tr>
<th>Cross Section</th>
<th>Delaware Street</th>
<th>Delaware Street</th>
<th>28th Ave East of Delaware</th>
<th>28th Ave West of Delaware</th>
<th>Franklin Pkwy/31st Ave</th>
<th>Residential Street</th>
<th>Residential Street w/Bike</th>
<th>One-way Street</th>
<th>Alleys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>Arterial</td>
<td>Arterial</td>
<td>Collector</td>
<td>Collector</td>
<td>Arterial</td>
<td>Local</td>
<td>Local</td>
<td>Local</td>
<td>Private</td>
</tr>
<tr>
<td>Vehicular Movement</td>
<td>2-way</td>
<td>2-way</td>
<td>2-way</td>
<td>2-way</td>
<td>2-way</td>
<td>2-way</td>
<td>2-way</td>
<td>One-way</td>
<td>2-way</td>
</tr>
<tr>
<td>Movement Characteristic</td>
<td>Medium</td>
<td>Slow</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Slow</td>
<td>Slow</td>
<td>Slow</td>
<td>Slow</td>
</tr>
<tr>
<td>No. of Travel Lanes</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Right-of-way</td>
<td>78’</td>
<td>84’</td>
<td>72’-83’</td>
<td>82’</td>
<td>79’</td>
<td>60’</td>
<td>60’</td>
<td>47’</td>
<td>24’</td>
</tr>
<tr>
<td>Pavement Width (curb to curb)</td>
<td>54’</td>
<td>60’</td>
<td>36’-47’</td>
<td>57’</td>
<td>55’ - 57’</td>
<td>36’</td>
<td>36’</td>
<td>24’</td>
<td>20’</td>
</tr>
<tr>
<td>Median Width</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Sidewalk Width</td>
<td>7’</td>
<td>12’</td>
<td>6’ on the south side only</td>
<td>7’ on the south side only</td>
<td>6’-7’</td>
<td>7’</td>
<td>7’</td>
<td>7’ bldg side only. 6’ park side</td>
<td>None</td>
</tr>
<tr>
<td>Planting Strip Width</td>
<td>4.5’ + curb</td>
<td>5’ tree pits</td>
<td>9.5’ + curb</td>
<td>4.5’ + curb</td>
<td>4.5’ + curb</td>
<td>4.5’ + curb</td>
<td>5’</td>
<td>4.5’ + curb’ bldg side only</td>
<td>2’ each side</td>
</tr>
<tr>
<td>On-street Parking</td>
<td>None</td>
<td>Angled 45° both sides (18’’)</td>
<td>Yes, both sides (7’)</td>
<td>None</td>
<td>None</td>
<td>Parallel, both sides</td>
<td>Parallel, one side (7’)</td>
<td>Parallel, bldg side only (7’)</td>
<td>None</td>
</tr>
<tr>
<td>Striping</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Curb Type &amp; Radius</td>
<td>Raised, 20’</td>
<td>Raised, 20’</td>
<td>Raised, 20’</td>
<td>Raised, 20’</td>
<td>Raised, 20’</td>
<td>Raised, 15’</td>
<td>Raised, 15’</td>
<td>Raised, 15’</td>
<td>15’ flush</td>
</tr>
<tr>
<td>Bike Facilities</td>
<td>Class II Bike Lanes (5’)</td>
<td>None</td>
<td>Class I - 10’ north side</td>
<td>Class I - 13’ north side (no trees)</td>
<td>None</td>
<td>None</td>
<td>Shared Lanes</td>
<td>Class II Bike Lane (bldg side only)</td>
<td>None</td>
</tr>
<tr>
<td>General Plan Classification</td>
<td>Arterial</td>
<td>Arterial</td>
<td>Collector</td>
<td>Collector</td>
<td>Arterial</td>
<td>Local</td>
<td>Local</td>
<td>Local</td>
<td>Private</td>
</tr>
</tbody>
</table>

November 7, 2005
Parking

Parking management guidelines for land use in Phase II shall be adopted as part of the Design Guidelines and Development Standards.

- Parking management shall emphasize supply and possibly pricing strategies that work in concert with the development's transit orientation. Parking supply strategies to be examined include: preferential parking for carpools and vanpools; tandem parking; reduced minimum parking requirements for shared parking between complementary uses; transit orientation, and Transportation Demand Management programs implemented by employers; parking maximums to ensure development does not over-provide parking; and neighborhood parking management plans to eliminate parking overflow into residential areas.
- The maximum parking ratio for commercial uses shall be 2.75 - 3.25 spaces per 1,000 s.f., except that retail uses may have a parking ratio of up to 4 spaces per 1,000 s.f.
- The maximum parking ratio for residential uses shall be 1.75 - 2.25 spaces per residential unit.
- The final parking ratios shall be determined during Site Plan and Architectural Review (SPAR), based upon Transportation Demand Management parking studies.
- Subterranean parking may cross boundaries between Blocks and sub-Blocks/parcels where those Blocks and sub-Blocks/parcels are not divided by public streets.
- Parking shall meet all Building code and Subdivision Map Act requirements, unless otherwise specifically provided for in this Specific Plan Amendment.
- Tandem and shared parking are permitted and encouraged. Final determination shall be made at SPAR approval.

Pedestrian Connection and Bike Path Requirements

The overall design intent is to ensure that the public realm of Phase II is of human scale, a pleasant pedestrian experience, and not dominated by automobiles.

- All streets in Phase II must provide continuous sidewalks, curbs and buffers from traffic. Planting strips should be provided on most streets to reduce the apparent street widths and crossing distances and buffer pedestrians from traffic. On-street parking should be required on most streets to buffer pedestrians from the actual and perceived danger of moving traffic.
- Pedestrian crossings must be provided at all signalized intersections. On selected streets, particularly Delaware Street, pedestrian crossings may be enhanced with curb extensions.
- Intersection curb radii should be minimized to slow cars and shorten crossing distances.
- Through-Block pedestrian connections are encouraged to provide easy access and shortcuts to the rail station.

Specific Pedestrian Improvements

The ultimate project design must provide for a link between Phase I and the proposed Caltrain station and El Camino Real via the continuation of the visual axis created in Phase I and the maintenance of the Class I pedestrian and bicycle path developed as part of Phase I. The visual axis in Phase II shall run from the eastern property line at the Franklin Campus, terminating at Delaware Street and the train station through a dedicated pedestrian pathway, view corridor easement, street right of way or similar mechanism.
Bay Meadows Phase II shall complete a portion of the San Mateo Regional Bike Trail Plan by providing designated bike connections to existing and planned off-site bike facilities to the south and to the north (See Figure IV-51 Bike Connection Diagram). Three types of bike routes are proposed for the Plan. Class I multi-use bike paths shall be provided for cyclists where possible, subject to land use, right of way and geometry configuration constraints. Proposed Class I routes include 28th Avenue and Delaware Street south of 31st Avenue. Portions of Delaware Street and the linear park couplet provide north south Class II bike lanes. Selected residential streets are also dimensioned as Class III bicycle routes for cyclists sharing lanes with slow moving vehicles. A Class III bike route is proposed for 29th Avenue, to enhance bike access to the new CalTrain station from within the project boundaries.

Regional bicycle travel through the site is comprised entirely of Class I bike paths and Class II bike lanes. Because of diagonal parking, a Class II bike lane cannot be accommodated along Delaware between 28th and 31st Avenues, so the following equivalent alternative facility is proposed. The north south route begins with Class II bike lanes on Delaware Street north of 28th Avenue, transitioning to a Class I path along the north side of 28th, and then crossing 28th at a signalized location to connect to the Class II lanes on the north-south linear park couplet. These bike lanes transition back to a Class I path at the southern end of the linear park located just east of the Square at the corner of 31st and Delaware. It continues on Delaware via a signalized crossing of 31st as a Class I path south of 31st. Two additional paths along the rail right of way, one from north of 28th and one from south of 31st, are proposed to allow bike commuters on Delaware to access the ends of the new train station platform. These paths terminate at their respective station platform ends.

All routes and trails connect directly with the network of sidewalks and pedestrian crossings, and connections between multi-use paths and bike lanes will be provided at signalized intersections with protected crossings. This is especially important for bike paths and trails connecting to the CalTrain station, where cyclists can transfer to different modes of public and private transport. Those trail alignments and geometry, as well as the provision of bike parking will be integrated with the ultimate station design process.
FIGURE IV-51
Bicycle Connection Diagram
The proposed project is a mixed development consisting of both residential and commercial buildings. Site development is to include the construction of roadways, parkland and the installation of utilities.

The Bay Meadows site is part of a large watershed that empties to the Bay through the Borel Creek. During high tide and storm events, the Borel Creek can fill to capacity, delaying the drainage flow from the watershed. Stormwater drainage delays are currently handled by the infield pond within the Phase II area, and inadvertent ponding also occurs in the Expo Center parking lots and on Saratoga Avenue.

The following aspects of the Project will change the watershed stormwater drainage:

- Existing buildings and parking lots will be removed.
- Existing racetrack, detention basin and infield area will be removed.
- New buildings and streets will be built.
- New parks will be built.
- Some diversions to the existing stormwater drainage system will be included to maximize the benefit to the proposed storage facilities.
- The total watershed area in the existing and proposed models = 151 acres approximately.
- The existing effective watershed area modeled = 108.3 acres approximately.
- The proposed effective watershed area modeled = 123.5 acres approximately, an increase of 14%. This is due to an overall increase in the area of impermeable surfaces within the site.

To accommodate the increase in the effective watershed area and the relocation of the infield pond, and to partially mitigate the existing ponding problem on the Expo Center and Saratoga Avenue, stormwater runoff storage facilities are provided as part of the new infrastructure development so that the existing drainage system is not negatively impacted (See Figure IV-52).

Stormwater runoff from the project area will be stored within the project area in two ways. First, box culverts and pipes will be provided beneath 28th Avenue that are designed to accommodate up to a 2-year, 24-hour storm event. The potential exists for the box culverts to be replaced by a surface pond that could be a water feature of the Community Park. Second, additional temporary storage capacity to accommodate major storm events with a return period of more than 2 years will be provided in the northeast corner of the Bay Meadows project site. This could consist of swales and playing fields or other areas that could flood for several hours during long periods of heavy rainfall. The short-duration storage areas will require a surface area of approximately 4-acres and would be designed to take account of public safety issues when these areas are acting as storage areas. The grading of the areas that would become the perimeter of the storage basins would be such that the public's safety is not compromised. These storage areas do not have to be contiguous, as they can be linked hydraulically with underground pipe.
The elevation of the bottom of the temporary storage area in the park is planned at approximately +98.5ft [Adjusted (+100) City of San Mateo Datum]. The nearest adjacent property is the Exposition Center parking lot, which has a minimum ground level in a small area of approximately +98.5ft and is known to collect storm water when the Borel Creek overtops Saratoga Drive. The Exposition Center parking lot varies in elevation from +98.5ft to +107ft approximately. The proposed park would provide additional storm water storage during these events and will provide some accommodation of the storm water currently collected in the Exposition Center. The possible location of the short-duration storage area is constrained by the required bottom level of +98.5ft, the required surface area of approximately 4-acres and the transition to the adjacent grading.

**FIGURE IV-52**
Storm Drain Improvement Diagram
The short-duration storage areas would be designed to detain storm water during rainfall events in excess of the 1 in 2 year return period storm. These areas would be constructed with a free draining subgrade to minimize the length of time that water is held on the surface. It is anticipated that these areas would be completely drained within 24 hours after the cessation of storm events with a return period up to and including the 100 year storm.

**Storm Water Quality**

An important component of the ultimate sustainability of the Bay Meadows Phase II area will be the quality of storm water output from the site. As storm water is discharged into Borel Creek, which ultimately flows into the Bay, the design of the storm water system will necessarily incorporate provisions to discharge stormwater of appropriate quality.

The storm water drainage system will be designed in accordance with applicable water quality requirements as implemented by the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board), which will approve the design and issue a National Pollutant Discharge Elimination System (NPDES) Permit before construction is allowed to proceed. To obtain a permit, the project has to demonstrate that it meets the storm water quality control requirements of the Regional Board, by utilizing Best Management Practices (BMPs) to reduce pollutant introduction into the watercourses from storm water discharges.

Due to the diversity in climate, receiving waters, construction site conditions and local requirements, the Regional Board will not dictate which BMPs should be implemented for any given project. Instead, the Bay Meadows Phase II project will implement the most appropriate BMPs for its particular set of site constraints. The BMPs that are available for use at Bay Meadows can be broadly summarized as follows:

**Treatment Control BMPs**

Treatment Control BMPs are structural practices that seek to treat runoff using one or more of the following treatment methodologies:

- Retention / Detention:
  - dry detention basins
  - wet ponds
  - cisterns
  - crushed stone reservoir base rock under pavements

- Infiltration / filtration:
  - biofilters
  - swales
  - rain gardens*

(*A rain garden is a bowl-shaped landscape area planted with native perennial plants that is designed to absorb stormwater run-off from impervious surfaces such as roofs, roadways and parking lots. Studies have shown that up to 70% of the pollution in our streams, rivers
and lakes is carried there by stormwater, and the rain garden is designed to naturally filter run-off before it leaves the site. They may be designed in formal or informal styles, and may range in size from small domestic gardens to more elaborate features running through parks or along streets.)

- Mechanical devices:
  - oil separators
  - media filters

**Source Control BMPs**

Source Control BMPs are operational practices that reduce pollution by controlling pollutants at the source. Examples of these BMPs include:

- Provision of efficient irrigation systems
- Providing storm drain system signs to reduce waste dumping
- Alternative building materials
- Porous pavement
- Appropriate design of trash enclosures, recycling areas and outdoor material storage areas

Wherever possible, the selected BMPs will be integrated into the urban landscape, however it should be recognized that this is not always practical in a highly urbanized area such as Bay Meadows. For example, the widespread use of swales will compromise the pedestrian-oriented nature of this Transit Oriented Development.

In areas where BMPs such as swales, curb cuts or curbless road edges, rain gardens and pervious pavement cannot be easily integrated into the urban landscape, alternative water quality treatment features (such as ponds and mechanical devices) will be used to meet the Regional Board's requirements. Specific measures will be determined as part of the SPAR process.

The most significant site constraints at Bay Meadows with regard to storm water BMPs include: a high water table; underground parking garages (that minimize urban sprawl) and underlying soils that are generally impervious. As a result, the use of infiltration type BMPs will be constrained, therefore an 'end of pipe' solution (such as a wet pond) may be the most practical solution for some parcels and roads within the project.

**Sewer, On Site**

The Specific Plan Area will be served by a network of approximately 8 to 15 inch diameter pipes, which will connect to the City sewer system.
Sewer, Off Site Connection

There are two existing sewer systems that Bay Meadows could connect to:
- The Delaware–Concar sewer system at the west side of the site
- The Los Prados–Norfolk Street sewer system to the east of the site on the east side of Highway 101.

At this time it is expected that the completed project will discharge its sewer flows to the Los Prados/Norfolk sewer system. The upgrade of the Los Prados/Norfolk Sewer system, which consists of replacing or paralleling much of the existing piping to larger diameters, is in the City's Capital Improvement Program (CIP).

There are several options for the route from the Specific Plan Amendment site to the existing Los Prados/Norfolk sewer system as described below (See Figure IV-53):
- Option 1-north along Saratoga to the Borel Creek, then East along the channel edge to Bermuda Avenue.
- Option 2a-north east across the City Park adjacent to the Borel Creek to Highway 101. The main would then cross under Highway 101 and proceed to Norfolk inside the Caltrans ROW.
- Option 2b-east along the Channel edge to Norfolk.

The details of the Sewer System will be determined at the time of SPAR approval. The pumping station will be located in the buffer area between the Borel Creek and Saratoga Drive.

Water

Water service will extend to the Specific Plan Area, connecting to the existing water systems on Saratoga Drive and Delaware Street. Throughout the Phase II redevelopment area approximately 8-15 inch diameter mains will be installed to provide domestic and fire service (See Figure IV-54).

The transition position between the high pressure 24-inch main and the 14-inch low pressure main will be relocated from Delaware/Franklin to Delaware/28th. The new low pressure main will be placed in the relocated Delaware Street. The existing 24-inch High Pressure main located in Delaware will be removed.

All water supply and distribution systems located in the public right-of-way are to be maintained by the CWSC.

Emergency Fire Water Storage

An emergency fire water storage requirement will be satisfied in one of two ways. If the wet storage storm water pond is provided in the Community Park, its volume will provide the requisite fire water storage. If the pond is not provided, the capacity will be provided in an underground pipe storage system located beneath the Linear Neighborhood Park. In either case the storage facility will have a minimum capacity of 600,000 gallons, unless otherwise agreed by the City of San Mateo Fire Marshal, and will be designed to maintain sufficient water quality for fire fighting purposes.
FIGURE IV-53
Sewer Improvement Diagram
FIGURE IV-54
Water Improvement Diagram
Utilities

The Pacific Gas and Electric Company (PG&E) will provide electrical and gas service to the Specific Plan Area. It is anticipated that SBC and others (to be confirmed) will provide telecoms service. Utility systems located in the public right-of-way and up to meter service are to be maintained by the service provider. The power and telecom supplies will be routed in a shared Joint Trench throughout the Specific Plan Area.

Grading

The grading assumptions made for Bay Meadows Phase II are as follows:

• At the boundary wall behind McLellan Street, Franklin and Saratoga, the proposed contours match the existing.

• On the western boundary at 28th Avenue, the elevation has been fixed by the elevation given for proposed road elevation underneath the future rail grade separation as described as the preferred alternative in the JPB Report (Final Study Report for Caltrain Grade Separations and Station Relocation for the City of San Mateo; Parsons Brinckerhoff Quade & Douglas, Inc; November 29, 2001). This elevation at the proposed railroad is 113ftAD.

From the grade separations, the proposed road lifts up slightly to the proposed Delaware road alignment. From here elevations fall away gradually to tie into Saratoga Drive.